

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 Claim 1 (original): A fixing device for an image
2 forming apparatus comprising:

3 a heat roller to be heated by eddy current;

4 an induction heating element for generating the eddy
5 current on said heat roller, said induction heating element
6 being disposed along said heat roller to face at least a
7 part of said heat roller;

8 a plurality of coil cores provided outside said
9 induction heating element for covering a part of said
10 induction heating element, said plurality of coil cores
11 being arranged at an interval in a longitudinal direction
12 of said induction heating element, said plurality of coil
13 cores being arranged such that a longitudinal direction of
14 one of said plurality of coil cores forms a predetermined
15 angle with said longitudinal direction of said induction
16 heating element.

1 Claim 2 (original): The fixing device as claimed in
2 claim 1, wherein said predetermined angle is an acute
3 angle.

1 Claim 3 (currently amended): The fixing device as
2 claimed in claim 2, wherein said plurality of ~~coire~~ coil
3 cores are arranged at two different intervals in said
4 longitudinal direction of said induction heating element.

1 Claim 4 (original): The fixing device as claimed in
2 claim 1, wherein said predetermined angle and said interval
3 are arranged such that heat distribution of said heat
4 roller is approximately uniform in a longitudinal direction
5 of said heat roller.

1 Claim 5 (original): The fixing device as claimed in
2 claim 1, wherein said plurality of coil cores are arranged
3 such that a total cross section of said plurality of coil
4 cores at a desired imaginary plane, which is orthogonal to
5 said longitudinal direction of said induction heating
6 element, is approximately uniform.

1 Claim 6 (original): The fixing device as claimed in
2 claim 3, wherein said plurality of coil cores are arranged
3 such that said intervals become smaller as each of said
4 coil cores is placed farther from a center of said
5 induction heating element in said longitudinal direction of
6 said induction heating element.

1 Claim 7 (original): The fixing device as claimed in

2 claim 2, wherein an interval at an end portion of the heat
3 induction heating element is smaller than that of a center
4 portion.

1 Claim 8 (original): The fixing device as claimed in
2 claim 2, wherein an angle defined by a coil core at end
3 portion of the induction heating element with the
4 longitudinal direction of the induction heating element is
5 smaller than that of a center portion.

1 Claim 9 (original): The fixing device as claimed in
2 claim 1, further comprising a central core provided along
3 with a longitudinal direction of said induction heating
4 element.

1 Claim 10 (original): The fixing device as claimed in
2 claim 1, wherein said coil cores are C-shaped coil cores.

1 Claim 11 (original): The fixing device as claimed in
2 claim 1, wherein length of the induction heating element is
3 larger than length of the heat roller and the heat roller
4 is located within the length of the induction heating
5 element.

1 Claim 12 (original): An image forming apparatus
2 comprising:

3 a fixing device for an image forming apparatus
4 comprising:

5 a heat roller to be heated by eddy current;

6 an induction heating element for generating the
7 eddy current on said heat roller, said induction heating
8 element being disposed along said heat roller to face at
9 least a part of said heat roller;

10 a plurality of coil cores provided outside said
11 induction heating element for covering a part of said
12 induction heating element, said plurality of coil cores
13 being arranged at an interval in a longitudinal direction
14 of said induction heating element, said plurality of coil
15 cores being arranged such that a longitudinal direction of
16 one of said plurality of coil cores forms a predetermined
17 angle with said longitudinal direction of said induction
18 heating element.

1 Claim 13 (original): The image forming apparatus as
2 claimed in claim 11, wherein said predetermined angle is an
3 acute angle.

1 Claim 14 (original): The image forming apparatus as
2 claimed in claim 13, wherein said plurality of coil cores
3 are arranged at two different intervals in said
4 longitudinal direction of said induction heating element.

1 Claim 15 (original): The image forming apparatus as
2 claimed in claim 12, wherein said predetermined angle and
3 said interval are arranged such that heat distribution of
4 said heat roller is approximately uniform in a longitudinal
5 direction of said heat roller.

1 Claim 16 (original): The image forming apparatus as
2 claimed in claim 12, wherein said plurality of coil cores
3 are arranged such that a total cross section of said
4 plurality of coil cores at a desired imaginary plane, which
5 is orthogonal to said longitudinal direction of said
6 induction heating element, is approximately uniform.

1 Claim 17 (original): The image forming apparatus as
2 claimed in claim 14, wherein said plurality of coil cores
3 are arranged such that said intervals become smaller as
4 each of said coil cores is placed farther from a center of
5 said induction heating element in said longitudinal
6 direction of said induction heating element.

1 Claim 18 (original): The image forming apparatus as
2 claimed in claim 13, wherein an interval at an end portion
3 of the heat induction heating element is smaller than that
4 of a center portion.

1 Claim 19 (original): The image forming apparatus as

2 claimed in claim 13, wherein an angle defined by a coil
3 core at end portion of the induction heating element with
4 the longitudinal direction of the induction heating element
5 is smaller than that of a center portion.

1 Claim 20 (original): The image forming apparatus as
2 claimed in claim 12, further comprising a central core
3 provided along with a longitudinal direction of said
4 induction heating element.

1 Claim 21 (original): The image forming apparatus as
2 claimed in claim 12, wherein said coil cores are C-shaped
3 coil cores.

1 Claim 22 (original): The image forming apparatus as
2 claimed in claim 13, wherein length of the induction
3 heating element is larger than length of the heat roller
4 and the heat roller is located within the length of the
5 induction heating element.

1 Claim 23 (original): A fixing device in which a
2 plurality of C shaped cores provided so as to cover a coil
3 are respectively slantwise arranged at an angle relative to
4 the axial direction of a heat roller.

1 Claim 24 (original): A fixing device for holding and

2 conveying a recording medium by a fixing nip part, melting
3 and pressing non-fixed toner on the recording medium to fix
4 the non-fixed toner to the recording medium, said fixing
5 device comprising:

6 a heat generating member having a rotating body made
7 of a magnetic metal member; and

8 an inductive heating unit having a magnetizing coil
9 which is opposed to the outer peripheral surface of the
10 heat generating member and has a bundle of wires with
11 surfaces insulated drawn in the direction of a rotation
12 axis of the heat generating member and wound along the
13 direction of the circumference of the heat generating
14 member and generates the heat of the heat generating member
15 by an electromagnetic induction,

16 wherein assuming that the entire length of the
17 magnetizing coil as length in the direction of the rotation
18 axis of the heat generating member is L_1 and the entire
19 length of the heat generating member as length in the
20 direction of the rotation axis thereof is L_2 , L_1 is larger
21 than L_2 and the heat generating member is arranged so that
22 its entire length is located within the entire length of
23 the magnetizing coil.

1 Claim 25 (original): A fixing device according to
2 claim 24, wherein a fixing roller to which the heat
3 generating member or the heat of the heat generating member

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4 is transmitted forms the fixing nip part.